

October 22, 2018



U.S. Department  
of Transportation

East Building, PHH-30  
1200 New Jersey Avenue S.E.  
Washington, D.C. 20590

**Pipeline and Hazardous  
Materials Safety Administration**

DOT-SP 11447  
(SIXTEENTH REVISION)

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: (See Individual Authorization Letter)
2. PURPOSE AND LIMITATION:
  - a. This special permit authorizes the transportation in commerce of a gas purification apparatus containing certain Division 4.1 (flammable solids) and Division 4.2 (spontaneously combustible solids) in non-DOT specification stainless steel pressure vessels. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
  - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
  - c. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.101 Column (9B) in that the maximum quantity is exceeded, §§ 173.187, 173.212, 173.240 and 173.242 in that non-DOT specification pressure vessels are authorized as a packaging for Division 4.1 and Division 4.2 materials, and the "away from" segregation requirement in § 176.83 for the storage of Division 4.1 and Division 4.2 materials in the same cargo hold.

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5. BASIS: This special permit is based on the application of SAES Pure Gas, Inc. dated May 24, 2018, submitted in accordance with § 107.105, and the public proceeding thereon.
6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Metal catalyst, dry	4.2	UN2881	II
Metal powders, flammable, n.o.s. (zirconium alloy)	4.1	UN3089	II

7. SAFETY CONTROL MEASURES:

a. PACKAGING: The Division 4.2 metal catalyst is contained within one to eight non-DOT specification stainless steel pressure vessels under a nitrogen or argon blanket not exceeding 25 psig. The pressure vessels and associated components must be arranged and securely affixed within a welded steel frame as shown in SAES Pure Gas, Inc. drawings on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD). The pressure vessels must be designed, constructed, and tested in accordance with Section VIII, Division I of the ASME Boiler and Pressure Vessel Code. The maximum allowable working pressure of each pressure vessel may not be less than 225 psig at 250 °C.

(1) Pressure vessels not for export must be "U" stamped.

(2) Pressure vessels for export only to a country not recognizing the ASME Code "U" symbol stamp may alternatively be stamped as required by the governing design code of the accepting country.

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b. The Division 4.1 metal powder is contained within one to eight DOT specification stainless steel pressure vessels under a nitrogen or argon blanket not exceeding 25 psig. The pressure vessels and associated components must be arranged and securely affixed within a welded steel frame as shown in SAES Pure Gas, Inc. drawings on file with OHMSAPD.

The total amount of metal powder contained within a single purifier shipment may not exceed 550 pounds. The pressure vessels must be designed, constructed and tested in accordance with Section VIII, Division I of the ASME Boiler and Pressure Vessel Code. The maximum allowable working pressure of each pressure vessel may not be less than 225 psig at 250 °C.

(1) Pressure vessels not for export must be "U" stamped.

(2) Pressure vessels for export only to a country not recognizing the ASME Code "U" symbol stamp may alternatively be stamped as required by the governing design code of the accepting country.

c. OPERATIONAL CONTROLS: For Division 4.2 metal catalyst (UN2881):

(1) The total amount of metal catalyst and/or nickel content contained within a single purifier shipment may not exceed 12,500 pounds.

(2) If transportation is by cargo only aircraft, the total amount of metal catalyst contained within a single purifier shipment may not exceed 8,000 pounds and the nickel content must not exceed 5,200 pounds.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this special permit and the HMR.

b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

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9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, cargo only aircraft and cargo vessel.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel, aircraft or motor vehicle used to transport packages covered by this special permit. The shipper must furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
  - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
  - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) - "The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

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12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for William Schoonover  
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at [http://hazmat.dot.gov/sp\\_app/special\\_permits/spec\\_perm\\_index.htm](http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm) Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: TG